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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,127	07/08/2003	Bryan Smith	P02701	2222
28548	7590	06/14/2005	EXAMINER	
STONEMAN LAW OFFICES, LTD 3113 NORTH 3RD STREET PHOENIX, AZ 85012			CHIN, PAUL T	
			ART UNIT	PAPER NUMBER
			3652	

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/616,127	Applicant(s) SMITH, BRYAN	
	Examiner PAUL T. CHIN	Art Unit 3652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 July 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. **The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.** Note that applicant does not generally recite the structural limitations.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "bending of the handle is about 2 to about ten degrees" (claims 19 and 21) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the

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renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The exact meaning of the phrase "handle means for providing at least one handle," (claims 1 and 22) is not clearly understood as to the particular meaning of the "handle means for the at least one handle". Moreover, the use of "in combination" (claims 1,4, and 21) is confusing. Applicant recites "a narrow-trenching tool system" and also claims "in combination". It is not clearly understood as to whether applicant is claiming "the combination of all the structural limitations" or "in combination with the intended use". Further, the exact meaning of the recited phases "attacher means for attaching said at least one handle bottom to said at least one handle top portion" (claims 1,4, and 21) are not clearly understood as to how the "handle bottom portion" is being attached to "the handle top portion" by the "attachment means". It is understood that "the bottom portion of the handle" is attached to "the top portion of the blade". There is no antecedent basis for "said at least one rod" (claim 13)," said at least one substantially hollow steel rod" (claim 14), or "said at least one bend" (claim 19). Note that claim 13 depends on claim

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11, but the "rod" is only previously recited in claim 12. It appears that claim 13 should depend on claim 12.

Regarding claims 1 and 22, the word "means" is preceded by the word(s) "handle means" in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word(s) preceding "means," it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967).

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-6, 12, 13, 15, 18, and 22, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Monica (1,458,987).

Monica (1,458,987) discloses a tool and a method comprising a soil-working blade (F) (Fig. 2) having a flat horizontal edge, foot pedestal (19), and a handle means having an elongated handle portion (B), a gripping means (13). Note that Monica's tool (1,513,179) is capable of performing the functional limitations such as applying bidirectional horizontal force.

Re claims 2, 5, and 15, the handle means includes a cross-handle bar (see Fig. 2) substantially perpendicular to the elongated handle portion.

Re claims 3 and 6, figures 1 and 2 show a foot pedestal portion having a substantially horizontal plate (19).

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Re claims 12 and 13, Monica's tool discloses a hollow steel rod (11) (fig. 2).

Re claim 18, the handle has one bend as shown in figure 4.

8. Claims 1-7,9,10,12,13,15,18, and 22, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Gregory (5,520,429).

Gregory (5,520,429) discloses a shovel for digging narrow trenches comprising a working blade (5) having a flat horizontal edge (11), a foot pedestal (17,17), and a handle means having an elongated handle portion (3,7), a gripping means (Fig. 1). Note that Gregory (5,520,429) is capable of performing the functional limitations such as applying bi0directional horizontal force.

Re claims 2,5, and 15, the handle means, as broadly as recited, includes a cross-handle bar (see Fig. 1) substantially perpendicular to the elongated handle portion.

Re claims 3 and 6, figure 1 shows a foot pedestal portion having a substantially horizontal plate (17).

Re claims 7,12 and 13, Gregory's tool discloses a steel blade and a hollow steel rod (7) (Col 2, lines 65-67).

Re claim 18, the handle has one bend as shown in figure 4.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 7-11 and 23, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Monica (1,458,987) in view of Lee (3,782,770).

Monica's tool (1,458,987), as presented in section 7 above, does not show that blade is being made of tempered steel. However, Lee (3,782,770) teaches a blade (13) being made of steel (Col 2, lines 52-61) to prevent a stiff blade. Accordingly, it would have been obvious to those skilled in the art on the blade of Monica's tool (1,513,179) to be made of steel as taught by Lee (3,782,770) to provide a stiff blade.

Re claim 11, the modified Monica's tool (1,458,987) does not show the structural dimension such as (the thickness of the metal blade or the diameter of the rod or).

However, it would have been obvious to those skilled in the art to optimize the structural dimension (between about one-sixteenth-inch and about one half inch thick) on the Monica's tool (1,458,987) in order to provide a stiff blade which is between from 1/16 inch to 1/2 inch.

Re claim 23, Monica's tool (1,458,987) does not clearly show a method to create a trench. However, Lee's tool (3,782,770) is a trenching tool to create a trench.

Accordingly, it would have been obvious to those skilled in the art to apply on the Monica's tool (1,458,987) the method as taught by Lee (3,782,770) to create a trench.

11. Claims 14,16,17, and 19-21, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Monica (1,458,987) in view of Silliman (457,871).

Monica's tool (1,458,987), as presented in section 7 above, does not show a hollow steel rod being perpendicularly welded to the top portion of the handle. However, Silliman (457,871) teaches a cross bar hollow handle (Figs. 1 and 2) and accordingly, it would have been obvious to those skilled in the art to provide a cross bar hollow handle (to replace the handle 13) of Monica (1,458,987) as taught by Silliman (457,871) to provide a stronger hold (two handles) to a user. Moreover, it would have been obvious to those

skilled in the art on the modified Monica's tool (1,458,987) to weld the connection between the cross bar and the elongated handle for permanent connection.

Re claims 19 and 21, the bending of the handle as shown in figure 4 is about 10 degree. It would have been obvious to those skilled in the art to locate the bending of the handle being (about from 12 inch to 16 inch from the bottom of the blade) on the Monica's tool (1,458,987) to provide a slight angle to a user without bending.

12. Claim 8, 11, and 23, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gregory (5,520,429).

Gregory (5,520,429), as presented in section 8 above, does not show that blade is being made of tempered steel. However, accordingly, it would have been obvious to those skilled in the art on the blade of Gregory (5,520,429) to be made of tempered steel to provide a stiff blade.

Re claim 11, it would have been obvious to those skilled in the art to optimize the structural dimension (between about one-sixteenth-inch and about one half inch thick) on the Gregory (5,520,429) in order to provide a stiff blade which is between from 1/16 inch to 1/2 inch.

Re claim 23, Gregory's trenching tool (5,520,429) does not clearly show a method of creating a wider bottom and a smaller top opening below the soil. However, accordingly, it would have been obvious to those skilled in the art to apply Gregory's trenching tool (5,520,429) to make a wider bottom and a smaller top opening below the soil, creating a trench with a narrow opening at the top.

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13. Claims 14,16,17, and 19-21, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gregory's trenching tool (5,520,429) in view of Napier (5,109,930).

Gregory's trenching tool (5,520,429), as presented in section 8 above, does not show a hollow steel rod being perpendicularly welded to the top portion of the handle. However, Napier (5,109,930) teaches a cross bar hollow handle (Figs. 1-3) and accordingly, it would have been obvious to those skilled in the art to provide a cross bar hollow handle (to replace the uppermost handle) of Gregory's trenching tool (5,520,429) as taught by Napier (5,109,930) to provide a stronger grip to a user. Moreover, it would have been obvious to those skilled in the art on the modified Gregory's trenching tool (5,520,429), to weld the connection between the cross bar and the elongated handle for permanent connection.

Re claims 19 and 21, the bending of the handle as shown in figure 4 is about 10 degree. It would have been obvious to those skilled in the art to locate the bending of the handle being (about from 12 inch to 16 inch from the bottom of the blade) on the Gregory's trenching tool (5,520,429) to provide a slight angle to a user without bending.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Crenshaw et al. (5,209,534) and Gracy (Des. 434,284) show an earth working tool.

Evan (5,743,580) and Connolly (84,797) show a tool having a rectangular shaped blade, an elongated handle, cross bar being attached perpendicularly to the handle. Connolly also shows a foot rest.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL T. CHIN whose telephone number is (571) 272-6922. The examiner can normally be reached on MON-THURS (7:30 -6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, EILEEN LILLIS can be reached on (571) 272-6928. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Paul Chin", with a stylized flourish at the end.

PAUL T. CHIN
Examiner
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